



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,082	07/30/2001	Gregory Merle Pineo	60,680-531	2107
26127	7590	02/13/2004	EXAMINER	
DYKEMA GOSSETT PLLC 39577 WOODWARD AVENUE SUITE 300 BLOOMFIELD HILLS, MI 48304-5086			CIRIC, LJILJANA V	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 02/13/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,082

Applicant(s)

PINEO ET AL.

Examiner

Ljiljana (Lil) V. Ciric

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 through 6, 8 through 15, and 17 through 20 is/are pending in the application.
- 4a) Of the above claim(s) 8 through 13, 19, and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 through 6, 14, 15, 17, 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3753

Response to Amendment

1. This Office action is in response to the amendment and arguments filed on November 19, 2003.
2. Claims 1 through 6, 8 through 15, and 17 through 20 remain in this application, all as amended, either directly or indirectly. Of these, claims 8 through 13, 19, and 20 remain withdrawn from further consideration as noted in greater detail below.
3. Please note that the examiner listed on the abovementioned amendment is NOT the examiner of record in this application. The examiner assigned to this application during its prosecution is not, nor has ever been, Tho V. Duong as noted by applicant on the amendment.

Response to Arguments

4. Applicant's arguments filed on November 19, 2004 have been fully considered but they are not persuasive, as follows.

As a preface to the following traversal of applicant's arguments, the examiner hereby notes that the claims in a pending application should be given their *broadest* reasonable interpretation. See In re Pearson, 181 USPQ 641 (CCPA 1974).

Applicant's arguments that *Seiler et al.* (previously of record, '837) does not anticipate applicant's claimed invention are not found persuasive. For example, applicant argues that the plunger of *Seiler et al.* does not block and unblock the flow between the inlet and the outlet, no matter which port is considered the inlet and which is considered the outlet. This argument is not found persuasive because, for example, applicant's arguments are based on an overly narrow interpretation of the functional limitation "to block...flow." The examiner hereby notes that "to block...flow" does not necessarily mean "to stop *all* flow", but rather may mean simply "to impede flow". Thus, when the reciprocating plunger or central shaft 66 of *Seiler et al.* is extended into the plug portion via port 54, flow between ports 58 and 56 is *most definitely* "blocked" or "impeded" thereby, whereas when the plunger or shaft 66 is removed from the plug portion, flow between ports 58 and 56 is *definitely* "unblocked".

Art Unit: 3753

Perhaps even more importantly, the aforementioned arguments made by applicant attempt to differentiate the inventive apparatus from the prior art in terms of function rather than in terms of actual claimed structure. Applicant is thus also respectfully reminded that claims directed to apparatus **must** be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). Also, "[A]pparatus claims cover what a device *is*, not what a device *does*. (Emphasis in original). *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Note that, with regard of the disclosed structure, applicant's bypass valve as shown in Figures 3 and 4 of the instant application appears to be virtually identical to the structure of the bypass valve shown in Figures 3 and 4 of *Seiler et al.* Thus, the subcombination of the bypass valve as disclosed in the instant application is clearly *not* inventive; the inventive concept, if any, possibly resides in the combination of the bypass valve *and* the particular heat exchanger structure modifications necessary to allow the valve to be integrally disposed within the heat exchanger body as shown in Figures 1 and 2 of the instant application. Such a combination has not, however, been clearly claimed to date, as noted in greater detail below.

In response to applicant's argument that the *Seiler et al.* ('837) reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a bypass valve having opposed plug walls *that would permit the bypass valve to be inserted into a heat exchanger at any convenient location and form an integral part of the heat exchanger*") are not recited in the rejected claims. Nowhere do the claims of the instant application clearly recite the bypass valve as being an integral part of the heat exchanger per se. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 3753

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Election/Restriction

5. Claims 8 through 13, 19, and 20 hereby remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

Drawings

6. The corrected formal replacement drawings were received on November 19, 2003. These drawings are hereby approved.

Claim Objections

7. Claims 1 through 6 are objected to because of the following informalities, for example: "of the type" [claim 1, line 1] should be deleted for improved clarity; "the plug walls" [claim 1, line 7] should be replaced with "said plug walls" for improved consistency; "predetermined" should be inserted immediately preceding "temperature" [claim 3, line 3] for improved consistency; and, "bias" [claim 5, line 1] should be replaced with "biasing" for improved grammatical correctness. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3753

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1 through 6, 14, 15, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are still written in a generally run-on fashion, and are thus rendered less readily readable and comprehensible.

With regard to claim 1 as written, for example, it is not clear whether the limitations "having spaced-apart wall portions defining flow openings in the wall portions" in the preamble of the claim are intended to convey that, for example, the heat exchanger has spaced-apart wall portions or that the plurality of tubular members have spaced-apart wall portions or that each of the plurality of tubular members has spaced-apart wall portions, thereby rendering indefinite the metes and bounds of protection sought by claim 1 and all claims depending therefrom.

The claims as amended appear to fail to consistently use the same terminology when referring to a particular element or elements, thus further rendering the intended scope of the claims indeterminate. For example, it is not clear whether or not the limitations "heat exchanger spaced-apart wall portions" [claim 1, lines 7-8] and "the wall portions" [claim 1, lines 9-10] refer to the same elements as the "spaced-apart wall portions" referred to in the limitation "having spaced-apart wall portions" [claim 1, line 2]. The examiner, however, is assuming that all of the above do refer to the wall portions recited in line 2 of the preamble; hence, it is recommended that the limitation "the spaced-apart wall portions" or "said spaced-apart wall portions" be used throughout the claims to refer to the recited wall portions.

Similarly, it is not clear whether or not either of the limitations "said bypass valve inlet and outlet openings" [claim 1, line 9; claim 14, lines 8-9] and "said inlet and outlet openings" [claim 1, line 13;

Art Unit: 3753

claim 14, line 12] refers to the “inlet and outlet openings in said plug walls” [claim 1, lines 5-6; claim 14, line 6].

Also, it is not clear whether the limitation “selected spaced-apart wall portions” [claim 14, lines 7-8] refers to wall portions selected from the wall portions recited in line 2 of the claim or to some other selected wall portions, such as selected spaced-apart wall portions of the bypass valve itself. If the former is the case, recommend replacing “selected spaced-apart wall portions” with “selected ones of said spaced-apart wall portions” or similar, for improved clarity. If the latter is the case, however, recommend adding additional limitations to the limitation “selected spaced-apart wall portions” in order to further differentiate the same from the similar but not identical limitation in line 2 of the claim.

The limitations “the distal end portions of a selected plate pair in each manifold *defining said spaced-apart wall portions with flow openings*” which have been newly added to claim 15 are written in a run-on fashion and are thus generally incomprehensible as written, thus rendering the intended scope of claim 15 generally indefinite. For example, does each manifold or do the distal end portions of a selected plate pair in each manifold or does a selected plate pair in each manifold define the spaced-apart wall portions with flow openings? Also, are the spaced-apart wall portions defined with/using the flow openings or do the spaced-apart wall portions merely have/include flow openings?

The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

Claim Rejections - 35 U.S.C. § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3753

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. As best can be understood in view of the indefiniteness of the claims, claims 1 through 6, 14, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by *Seiler et al.* ('837, previously of record)

Seiler et al. discloses a bypass valve fluidly or operably connected to a heat exchanger essentially as claimed, including, for example: a heat exchanger 12 having a plurality of tubular members or heat exchange conduits 22 and 24 having spaced-apart tubular member wall portions defining openings for the flow of fluid through the tubular members or heat exchange conduits 22 and 24 [see column 3, lines 38-47]; a bypass valve 14 or 44; a valve housing 46 defining a hollow plug portion corresponding to the housing portion encompassing the "opposed" walls and inlet/outlet structures including ports or openings 54, 56, and 58, the latter readable (in various combinations) on the bypass valve inlet and outlet openings as recited in the claims of the instant application; an actuator portion corresponding to chamber 48; and, an actuator 64 which is a thermal motor [column 4, lines 28-34] and which is releasably mounted in the actuator portion or chamber 48 with a reciprocating plunger or central shaft 66 extending into the plug portion via port 54 to block and unblock flow between the outlets and inlets 56 and 58 [see Figures 3 and 4]. Note that, broadly interpreted as required, the functional limitation "to block...flow" does not necessarily mean "to stop *all* flow", but rather may mean simply "to impede flow". When the reciprocating plunger or central shaft 66 of *Seiler et al.* is extended into the plug portion via port 54, flow between ports 58 and 56 is definitely "blocked" or "impeded" thereby, and when the plunger or shaft 66 is removed from the plug portion, flow between ports 58 and 56 is definitely "unblocked".

The reference thus reads on the claims.

Art Unit: 3753

12. The non-application of art against claim 15 should not be construed as an indication that the claim contains allowable subject matter but rather that the claims could not be examined on the merits due to indefiniteness.

Conclusion

13. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Billotte* discloses a vehicular heat exchanger including valve-regulated inlets and outlets. *Nishishita, Nishishita et al., Kinugasa et al., Brooks, and Seiler et al. ('282)* each discloses a heat exchanger including stacked plate manifolds and/or valve-regulated inlets and outlets.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925.

While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.

Application/Control Number: 09/918,082

Page 8

Art Unit: 3753


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (703) 308-1272.

The NEW central official fax phone number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

February 7, 2004


LJILJANA V. CIRIC
PRIMARY EXAMINER
ART UNIT 3753